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HB 43 Employer Rights

I stand before you today as a business owner and as a nurse practitioner certified in occupational health. I have 16 years of experience and specialized training as a consultant for drug free workplace programs and providing impairment assessment services for employers. I see daily that marijuana is killing and injuring employees in the workplace and causing carnage and wreckage on our highways.

I testified against this bill in the house committee because I did not feel that it was strong enough. I appreciate the house amendments and testify for the bill today. At the request of an employment law expert I have one recommendation: On page 8 line 27 please add "zero tolerance" before "provision." The marijuana industry claims that impairing effects of marijuana are short—that an employer can be confident that an employee who uses the drug after work will be fine the next day. But extensive scientific studies have shown that the impairing effects of marijuana are long lasting—days rather than hours—and significantly increase risk for injury and death. I have given you a handout with a brief synopsis of some of this research. Please contact me if you have questions about this.

I am requesting an amendment to allow employers to test oral fluid for drugs as an alternative to urine. Oral fluid specimen collection is less invasive, faster, easier, and more secure than urine specimen collection. Current statute does not allow oral fluid testing because there are no guidelines under 49 CFR Part 40 for this type of specimen. This amendment maintains the same protections for the employee: confirmation testing using highly specific laboratory methodology, review of all non-negative test results by a certified medical review officer, and the opportunity for the employee to request testing by a second laboratory.

The marijuana industry in our state is endangering our workplaces and highways and increasing costs for employers. Thank you for this bill to protect our Montana workers.

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HB 43 Amendments

End of Page 2 ADD:

Section 2. Section 39-2-207, MCA, is amended to read:

"39-2-207. Qualified testing program. A qualified testing program must comply with the following criteria:

(1) Testing must be conducted according to the terms of written policies and procedures that must be adopted by the employer and must be available for review by all employees 60 days before the terms are implemented or changed. ~~Controlled substance and alcohol testing procedures for samples that are covered by 49 CFR, part 40, must conform to 49 CFR, part 40. For samples that are not covered by 49 CFR, part 40, the qualified testing program must contain chain-of-custody and other procedural requirements that are at least as stringent as those contained in 49 CFR, part 40, and the testing methodology must be cleared by the United States food and drug administration.~~ At a minimum, the policies and procedures must require:

~~(4) The collection, transport, and confirmation testing of urine samples must be performed in accordance with 49 CFR, part 40, and the collection, transport, and confirmation testing of nonurine samples must be as stringent as the requirements of 49 CFR, part 40, in requiring split specimens as defined by the United States department of health and human services, requiring transport to a testing facility under the chain of custody, and requiring confirmation of all screened positive results using mass spectrometry technology.~~

(4) (a) The collection, screening, testing, transport, and confirmatory testing of samples must be performed with due regard to the privacy of the individual being tested and in a manner reasonably calculated to prevent substitutions, adulteration, or any other interference with collection or testing of samples.

(b) Urine specimen collectors, alcohol screening device technicians, and evidential breath testing device technicians must meet the requirements of 49 CFR, part 40.

(c) Sample processing procedures must include:

(i) the labeling of samples in order to preclude the possibility of misidentification of the person tested in relation to the test result provided; and

(ii) the handling of samples in accordance with reasonable chain of custody and confidentiality processes.

(d) Sample testing must conform to scientifically accepted analytical methods and procedures.

(5) (a) Controlled substance testing must include a confirmatory test before the result of any drug test may be used as a basis for employee sanctions.

(b) A confirmatory drug test refers to a second or additional test of a sample conducted by a laboratory utilizing an analytical method combining chromatographic separation and mass spectrometric identification or other reliable comparable method.

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(3) Nothing in the chapter may be construed to:

(a) prohibit an employer from including in any contract a **zero tolerance** provision prohibiting the medical use of marijuana; or

Marijuana: Impairment Kills

Marijuana is the most common illicit drug of abuse. In Montana over 12% of persons age 12 or older have used marijuana during the past month. (NSDUH) 80-100% of chronic marijuana users drive under the influence of marijuana. 70% of them do not believe that impairment from marijuana causes traffic crashes. (Terry & Wright, 2005) 15-21 year old drivers were 2.5 times more likely to drive under the influence of marijuana than alcohol. (Ferguson, & etal., 2008)

Data from the Fatality Analysis Reporting System (FARS) for Montana passenger vehicle drivers in fatal crashes shows marijuana use to be 13% or higher in the years 2007, 2008, and 2009. In 2009 marijuana use contributed to the deaths of 39 people on Montana highways. (Crancer, 2010)

The marijuana plant contains several substances with psychoactive properties. Tetrahydrocannabinol (THC) is the drug which causes the primary "feel good" and impairing effects. Absorption of THC is rapid and most efficient through inhalation with onset in seconds, peak 3-10 min, and 10-35% bioavailability [variability based on skill and smoking technique]. Sublingual absorption is also rapid with peaks reaching 14 ng/ml. Oral absorption is slow and erratic with peak in 1-2 hours , reaching 6 ng/ml, with only 6-7% bioavailable. Peak effects are later than peak blood levels because brain levels are still rising as blood levels fall. THC has a very large volume of distribution due to strong binding to tissues. The volume of distribution increases from 3L in a new user to 236L in a chronic user as the fatty tissues soak up the THC. (Grotenhermen, 2003) With the same dose of smoked marijuana maximum blood levels of THC in occasional users reached 49 ng/ml vs 121 ng/ml in chronic heavy users. Blood THC levels 8 hours later are not detectable in occasional users but are still 3.5 ng/ml in chronic users. 8 hours after placebo chronic users still have 3.3 ng/ml. (Toennes & etal., 2008) THC moves in and out of the brain easily and higher concentrations are found in the brain cortex than in blood. THC crosses the placenta and passes into breast milk. In heavy users the milk-to-plasma ratio can be as high as 8:1. This can result in an infant ingesting the weight adjusted dose equivalent of one joint in one feeding. (Djulus & etal., 2005) THC is metabolized in the liver through the cytochrome P450 complex. A high degree of first pass metabolism reduces bioavailability after oral administration. The major metabolites are THC-COOH, which has very little psychoactivity, and 11-OH-THC which is also psychoactive. There is slow equilibration with plasma & tissue and slow rediffusion of THC from body fat and other tissues into blood. The ½ life of THC has wide variability among individuals and is longer in chronic users than acute users. In acute users estimated ½ life is 25-36 hours and ½ life of THC-COOH is 3-5 days. THC-COOH may be detected in the urine for several weeks in chronic users.

Scientific studies of smoked marijuana are difficult to design due to wide variability in product quality and subject smoking technique. Pharmacokinetics and pharmacodynamics have been measured in occasional and chronic users, and these studies show wide intrasubject as well as intersubject differences. (Toennes & etal., 2008) Studies to measure impairment from drugs have three basic designs: 1) laboratory measurements of reaction time, calculations skill, and decision making, 2) closed course driving or computerized simulators, and 3) epidemiologic studies of drug use in crashes.

1) Laboratory studies show correlation between blood THC levels and impairment in function. At THC levels of 2-5 ng/ml critical tracking performance was equal to breath alcohol concentration (BAC) ≥ 0.05%. At THC levels >5 ng/ml performance on three tasks showed impairment greater than BAC > 0.10%. (Ramaekers & etal., 2006)

2) Driving on a test track after administering low doses of THC orally showed obvious impairment, with the tracking test most significant [keeping the car within the driving lane.] (Menetry & etal., 2005) Experienced pilots in a flight simulator showed decrements in performance 24 hours after a single dose of smoked marijuana. (Leirer, 1991)

3) To demonstrate risk of death in motor vehicle crashes a study must have 3 characteristics: 1) adequate power—enough crashes studied, 2) blood THC levels, and 3) culpability/responsibility analysis. There are two studies which meet these criteria and both show significant risk of death for a driver under the influence of marijuana. THC ≥ 5ng/ml is associated with relative risk of death of 6.6. (Drummer & etal., 2003) THC ≥ 1ng/ml is associated with relative risk of death of 2.3. (Biecheler & etal., 2008)

There are two aspects of impairment in driving: environment and driver. To drive safely is a complex interaction of these. A driver who may be able to drive safely during a summer day from home 2 blocks to the grocery store may be very unsafe at night on a two lane slushy road going 60 mph. It requires every bit of possible skill to safely avoid a hazard like deer, black ice, and other unsafe drivers. The smallest amount of an impairing drug may be too much, contributing to a driver's inability to avoid a crash, or contributing to the driver's responsibility for a crash. This is the basis of making the legal levels of impairing drug, "perse", at level of detection--any amount is too much.

For drivers who use alcohol law makers have decided that an increase in crash risk is acceptable--low levels of alcohol impairment are OK. The Department of Transportation has determined that the relative risk to public safety is significant at 0.02% BAC (commercial driver may not drive), and at 0.04% a commercial driver will lose his/her commercial drivers' license. Most other countries in the world have a perse limit of 0.04% to 0.05%. To answer the question, "What level of increased crash risk is acceptable?", one strategy might be to compare the increased crash risk for alcohol to the increased crash risk for other drugs. But it is difficult to compare alcohol to THC because alcohol has zero order (simple) pharmacokinetics; THC has complex pharmacokinetics. One study showed that THC at >5 ng/ml had the same fatal crash risk as BAC >0.15%. (Drummer & etal., 2003) The same study showed that THC plus alcohol >0.05% had risk 2.9 times greater that BAC >0.05% alone.

In Montana we have three different rights which must be balanced: 1) the constitutional right of privacy, "The right of individual privacy is essential to the well-being of a free society and shall not be infringed without the showing of a compelling state interest," [1] 2) the employer and employee right to a safe workplace,[2] and 3) the public right to safe highways.[3] The state has shown compelling evidence that an individual does not have the right to endanger the safety of the public. The individual right to be impaired is trumped by the public right to be protected from unsafe actions of the impaired person.

Marijuana causes significant impairment which lasts much longer than the "feel good" effects. A person impaired by marijuana is dangerous to self and others. This person should not be driving or performing any function which is safety sensitive, in other words, should not be doing any task where a momentary lapse of concentration could result in serious injury or death. Keep marijuana out of our workplaces and off our highways!

Marijuana: NOT legal, NOT medicine, NOT in the workplace, NOT around children, NOT on the highway.

Rebecca Sturdevant, MSN, APRN beckymadd@gmail.com Rebecca has 28 years of nursing experience, including work in correctional health care, acute care, home care, family practice, and for the last 15 years, occupational health. She has expertise and certifications related to evaluation of impairment. She is a volunteer with Mothers Against Drunk Driving.

[1] Montana Constitution, Section 10
[2] Montana Code Annotated 39-71-1502
[3] Montana Code Annotated 61-2-102

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